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(54) METHODS AND SYSTEMS FOR CONNECTED SALES ASSOCIATE SERVICES

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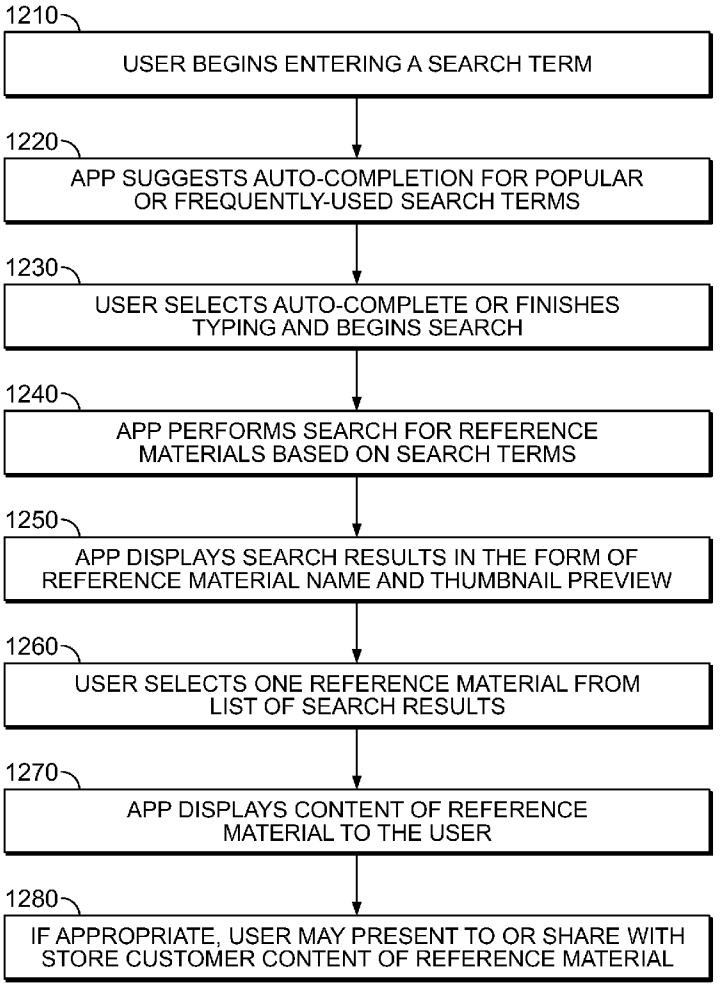
(57) **ABSTRACT**

A method and system for providing a connected sales associate service application via a mobile device. The application provides for an integrated platform upon which various tools for providing support to a sales associate are built. The application includes a database of information regarding the operation of a retail establishment, and a database of reference materials. The application provides a user interface for allowing several sales associate to access a central server for the retail establishment on multiple mobile devices. The user interface displays information regarding sales and inventory information and reference materials for products, such as user's manuals, which enable the sales associate to answer questions posed by customers. A sales associate can thus search for and find all store products which meet a customer's specifications.



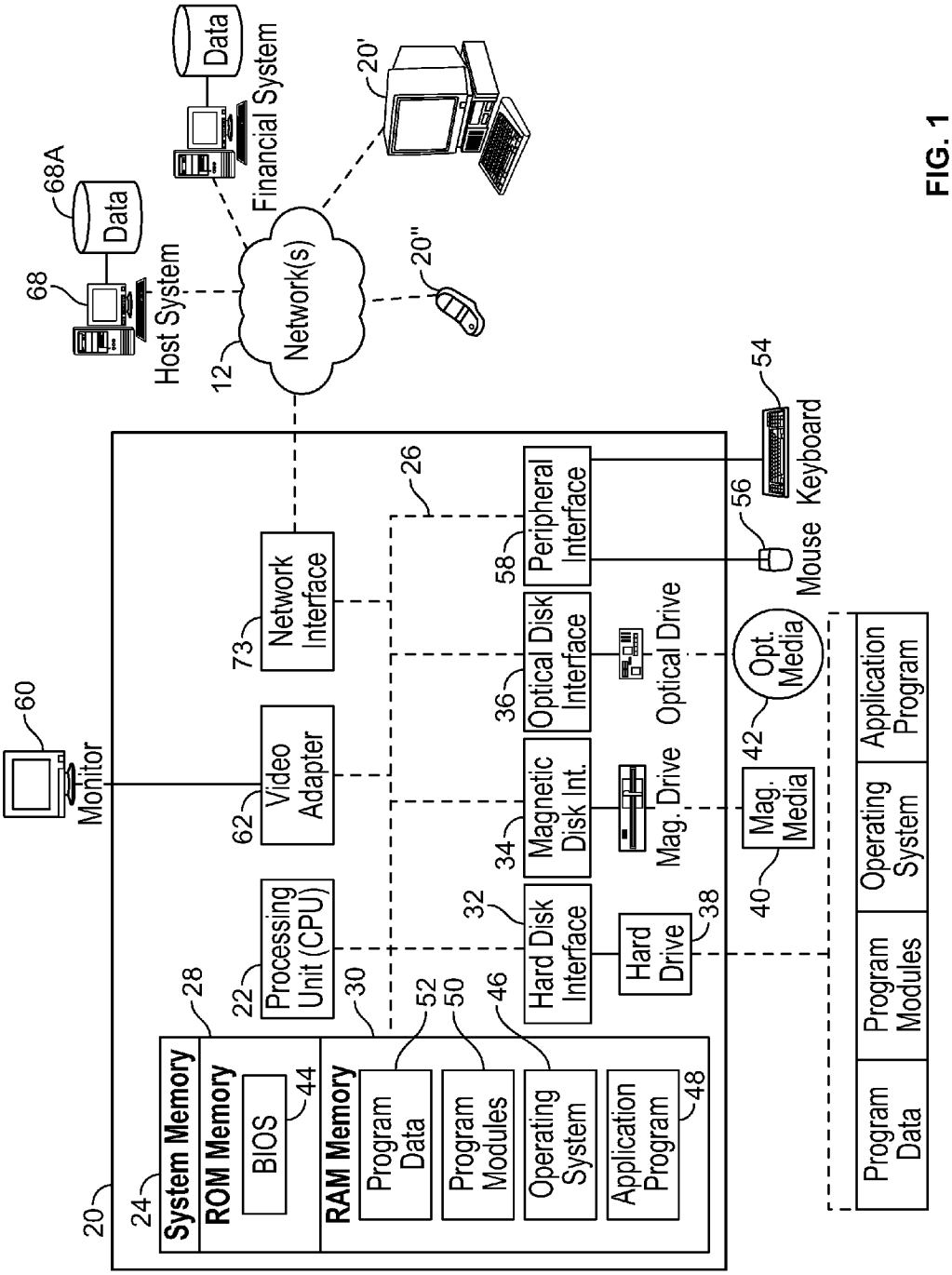

Data
Financial System
20'
68A
Data
68
Host System
Network(s)
12
20"
54
Keyboard
56
Mouse
26
Peripheral Interface
58
Network Interface
73
Optical Disk Interface
36
Optical Drive
Opt. Media
42
60
Monitor
Video Adapter
62
Magnetic Disk Int.
34
Mag. Drive
Mag. Media
40
Processing Unit (CPU)
22
Hard Disk Interface
32
Hard Drive
38
28
30
52
50
46
System Memory
24
ROM Memory
BIOS
44
RAM Memory
Program Data
Program Modules
Operating System
Application Program
48
20
Program Data
Program Modules
Operating System
Application Program

FIG. 1

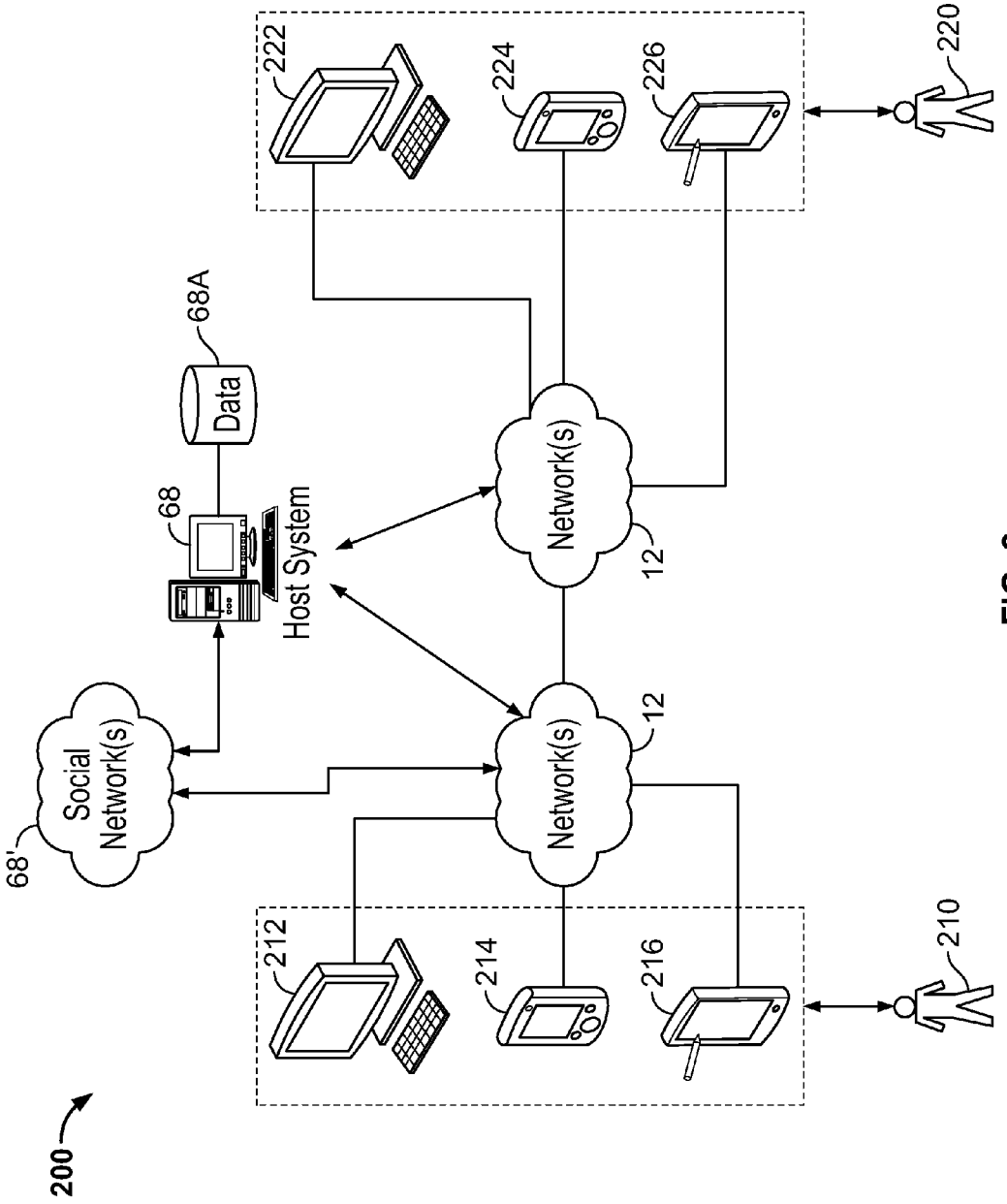

200
68'
Social Network(s)
68
Host System
68A
Data
Network(s)
12
Network(s)
12
212
214
216
210
222
224
226
220

FIG. 2

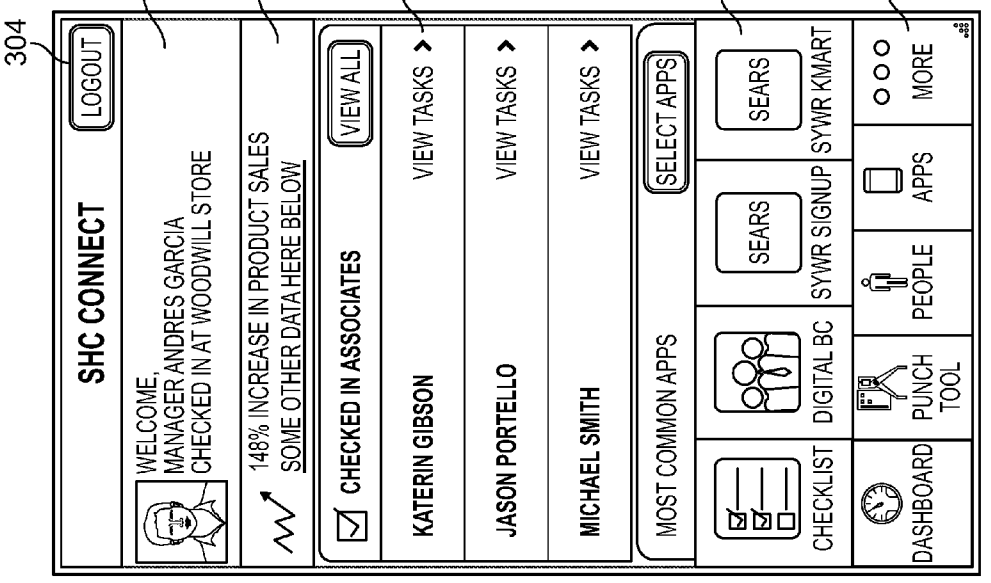

304
SHC CONNECT
LOGOUT
302
WELCOME,
MANAGER ANDRES GARCIA
CHECKED IN AT WOODWILL STORE
306
148% INCREASE IN PRODUCT SALES
SOME OTHER DATA HERE BELOW
CHECKED IN ASSOCIATES
VIEW ALL
308
KATERIN GIBSON
VIEW TASKS
JASON PORTELLO
VIEW TASKS
MICHAEL SMITH
VIEW TASKS
MOST COMMON APPS
SELECT APPS
310
CHECKLIST
DIGITAL BC
SEARS
SYWR SIGNUP
SEARS
SYWR KMART
DASHBOARD
PUNCH TOOL
PEOPLE
APPS
MORE
312

FIG. 3

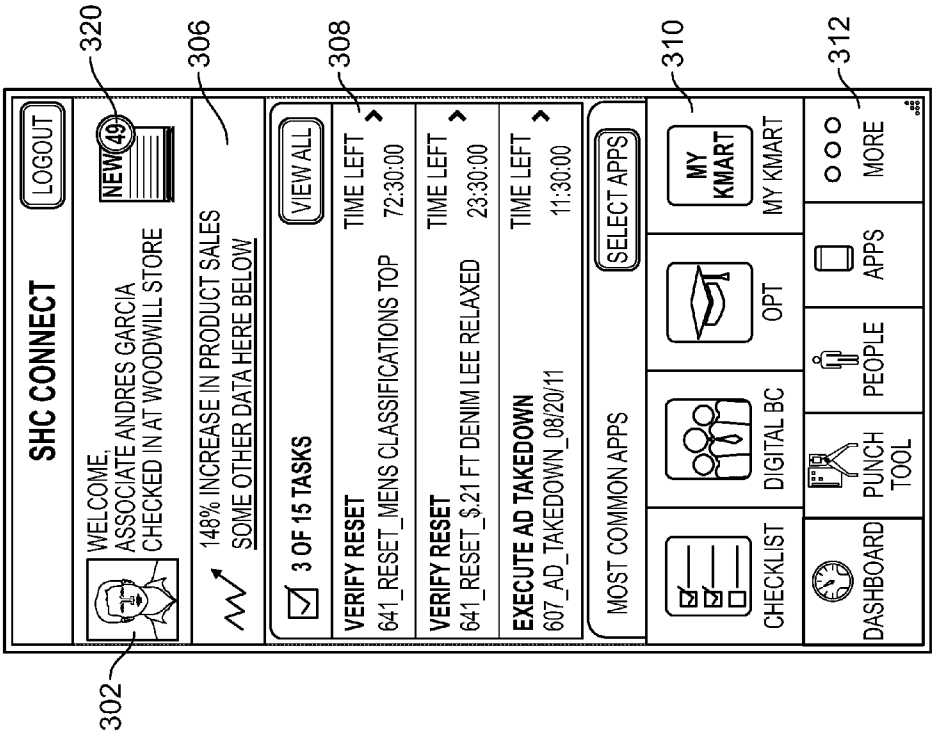

320
SHC CONNECT
LOGOUT
NEW (49)
306
WELCOME,
ASSOCIATE ANDRES GARCIA
CHECKED IN AT WOODWILL STORE
148% INCREASE IN PRODUCT SALES
SOME OTHER DATA HERE BELOW
308
3 OF 15 TASKS
VIEW ALL
VERIFY RESET
641_RESET_MENS CLASSIFICATIONS TOP
TIME LEFT
72:30:00
VERIFY RESET
641_RESET_$.21 FT DENIM LEE RELAXED
TIME LEFT
23:30:00
EXECUTE AD TAKEDOWN
607_AD_TAKEDOWN_08/20/11
TIME LEFT
11:30:00
MOST COMMON APPS
SELECT APPS
310
CHECKLIST
DIGITAL BC
OPT
MY KMART
DASHBOARD
PUNCH TOOL
PEOPLE
APPS
MORE
312
302

FIG. 4

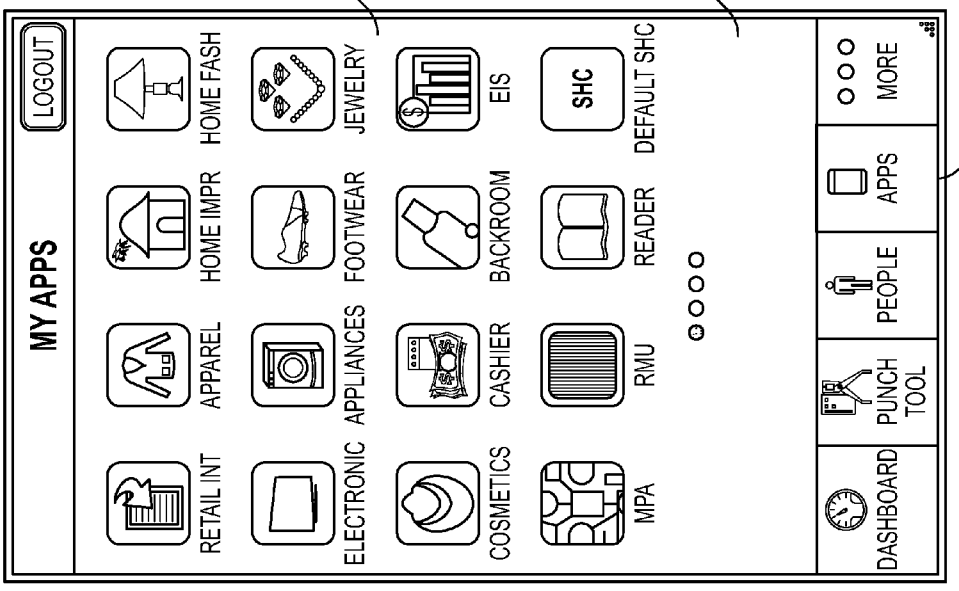

MY APPS
LOGOUT
RETAIL INT
APPAREL
HOME IMPR
HOME FASH
ELECTRONIC
APPLIANCES
FOOTWEAR
JEWELRY
COSMETICS
CASHIER
BACKROOM
EIS
MPA
RMU
READER
SHC
DEFAULT SHC
504
506
DASHBOARD
PUNCH TOOL
PEOPLE
APPS
MORE
502

FIG. 5

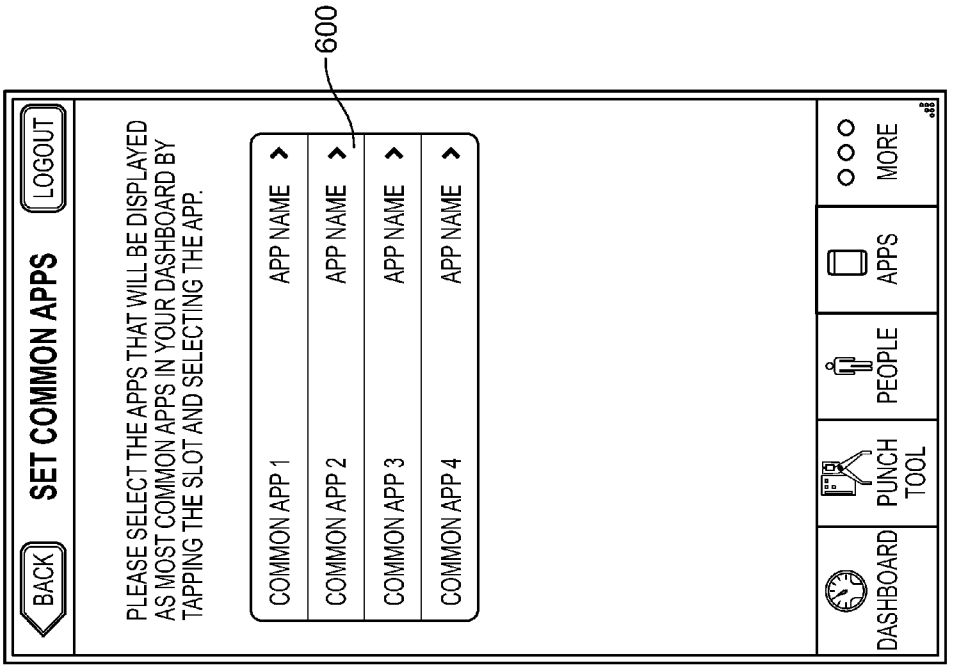

BACK
SET COMMON APPS
LOGOUT
PLEASE SELECT THE APPS THAT WILL BE DISPLAYED AS MOST COMMON APPS IN YOUR DASHBOARD BY TAPPING THE SLOT AND SELECTING THE APP.
600
COMMON APP 1
APP NAME
COMMON APP 2
APP NAME
COMMON APP 3
APP NAME
COMMON APP 4
APP NAME
DASHBOARD
PUNCH TOOL
PEOPLE
APPS
MORE

FIG. 6

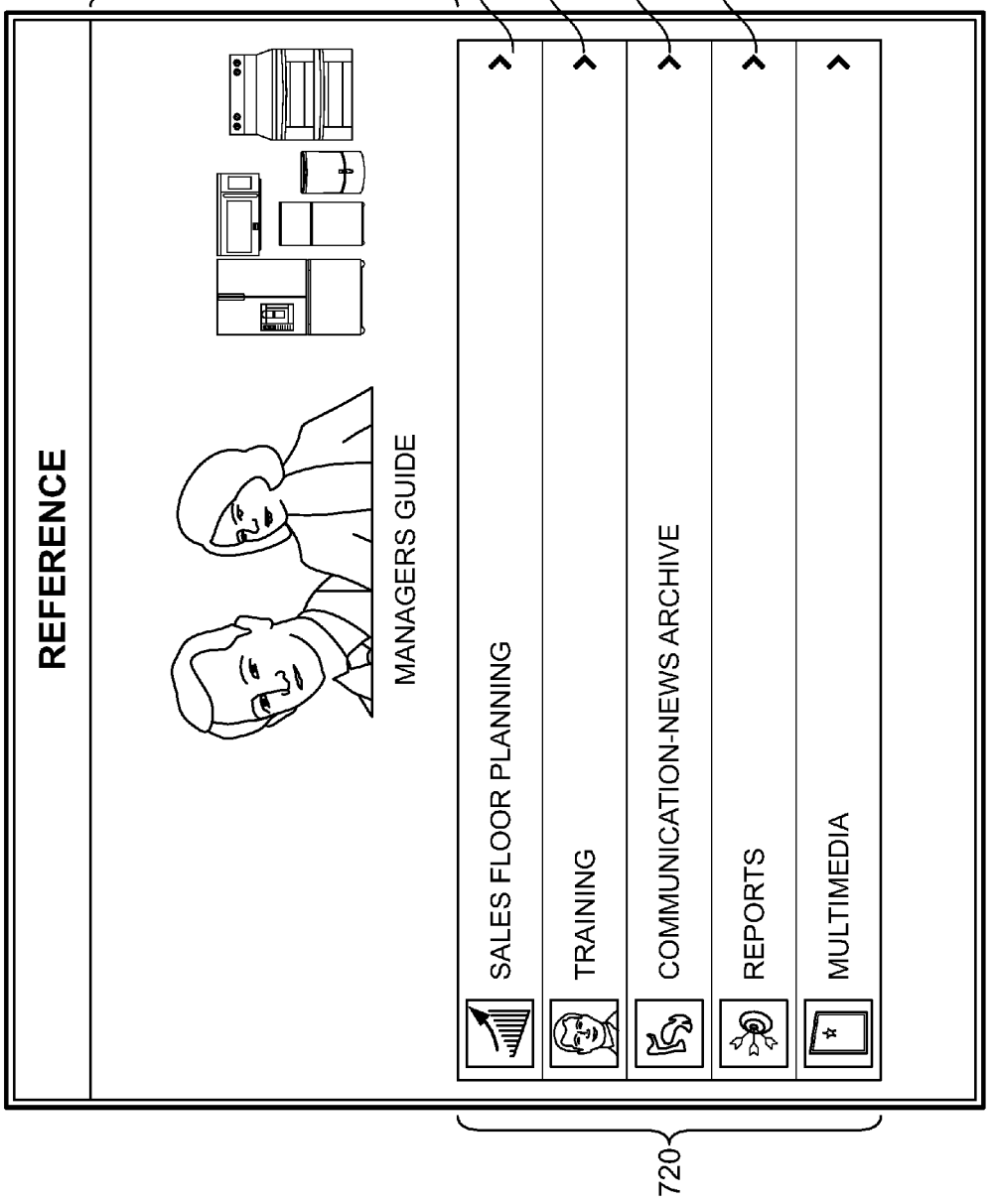

REFERENCE
MANAGERS GUIDE
SALES FLOOR PLANNING
TRAINING
COMMUNICATION-NEWS ARCHIVE
REPORTS
MULTIMEDIA
730
710
710
710
710
720

FIG. 7

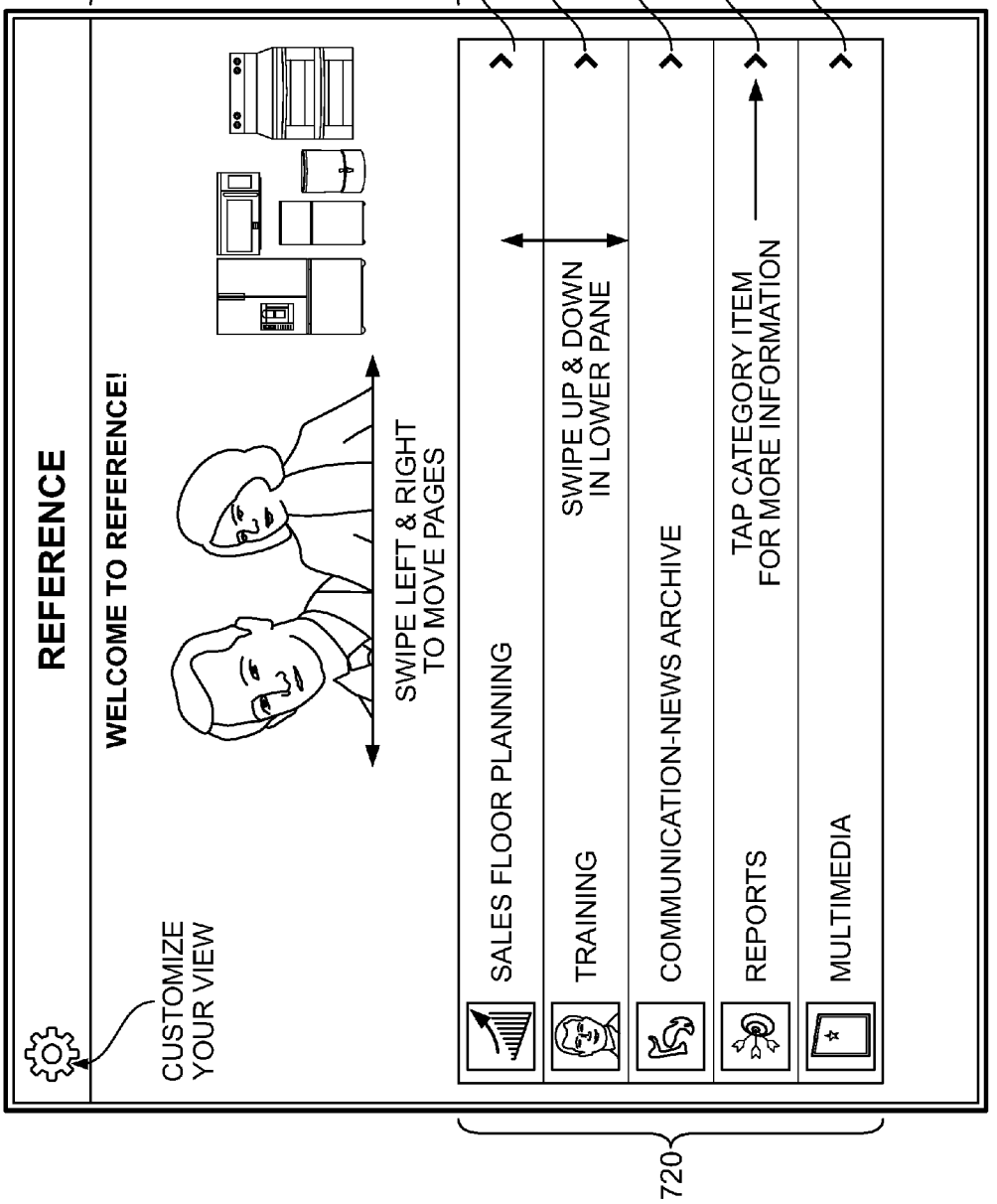

REFERENCE
WELCOME TO REFERENCE!
CUSTOMIZE YOUR VIEW
SWIPE LEFT & RIGHT TO MOVE PAGES
SALES FLOOR PLANNING
TRAINING
SWIPE UP & DOWN IN LOWER PANE
COMMUNICATION-NEWS ARCHIVE
REPORTS
TAP CATEGORY ITEM FOR MORE INFORMATION
MULTIMEDIA
730
710
710
710
710
710
720

FIG. 8

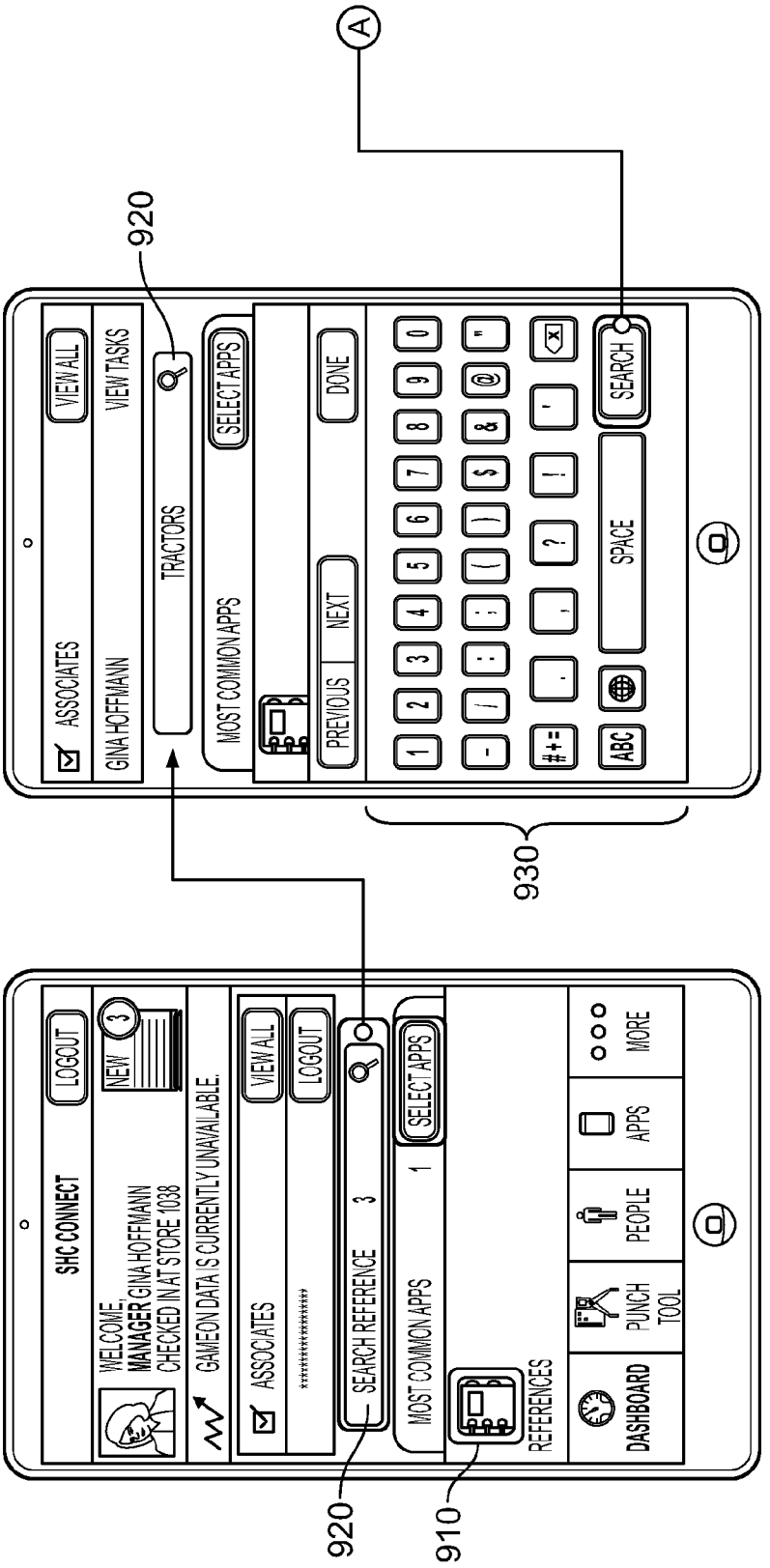

A
920
930
910
920
SHC CONNECT
LOGOUT
WELCOME,
MANAGER GINA HOFFMANN
CHECKED IN AT STORE 1038
GAMEON DATA IS CURRENTLY UNAVAILABLE.
NEW
3
ASSOCIATES
VIEW ALL
LOGOUT
SEARCH REFERENCE
3
MOST COMMON APPS
1
SELECT APPS
REFERENCES
DASHBOARD
PUNCH TOOL
PEOPLE
APPS
MORE
ASSOCIATES
VIEW ALL
GINA HOFFMANN
VIEW TASKS
TRACTORS
SELECT APPS
MOST COMMON APPS
PREVIOUS
NEXT
DONE
SEARCH
SPACE
ABC
#+=

FIG. 9

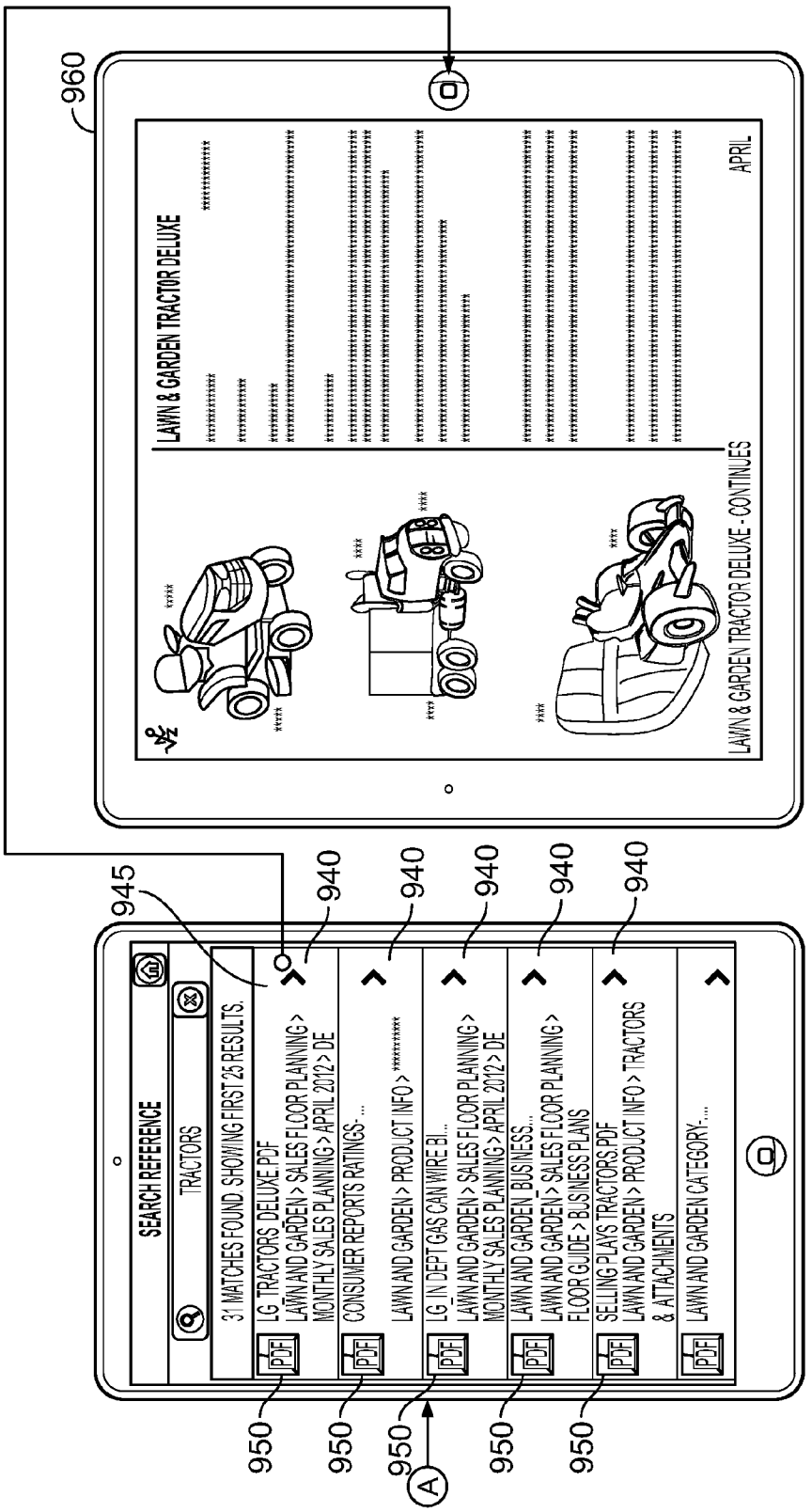

960
945
940
950
A
SEARCH REFERENCE
TRACTORS
31 MATCHES FOUND. SHOWING FIRST 25 RESULTS.
LG_TRACTORS_DELUXE.PDF
LAWN AND GARDEN > SALES FLOOR PLANNING > MONTHLY SALES PLANNING > APRIL 2012 > DE
CONSUMER REPORTS RATINGS -...
LAWN AND GARDEN > PRODUCT INFO > **********
LG_IN DEPT GAS CAN WIRE BI...
LAWN AND GARDEN > SALES FLOOR PLANNING > MONTHLY SALES PLANNING > APRIL 2012 > DE
LAWN AND GARDEN_BUSINESS...
LAWN AND GARDEN > SALES FLOOR PLANNING > FLOOR GUIDE > BUSINESS PLANS
SELLING PLAYS TRACTORS.PDF
LAWN AND GARDEN > PRODUCT INFO > TRACTORS & ATTACHMENTS
LAWN AND GARDEN CATEGORY -...
LAWN & GARDEN TRACTOR DELUXE
APRIL
LAWN & GARDEN TRACTOR DELUXE - CONTINUES

FIG. 9 (Cont.)

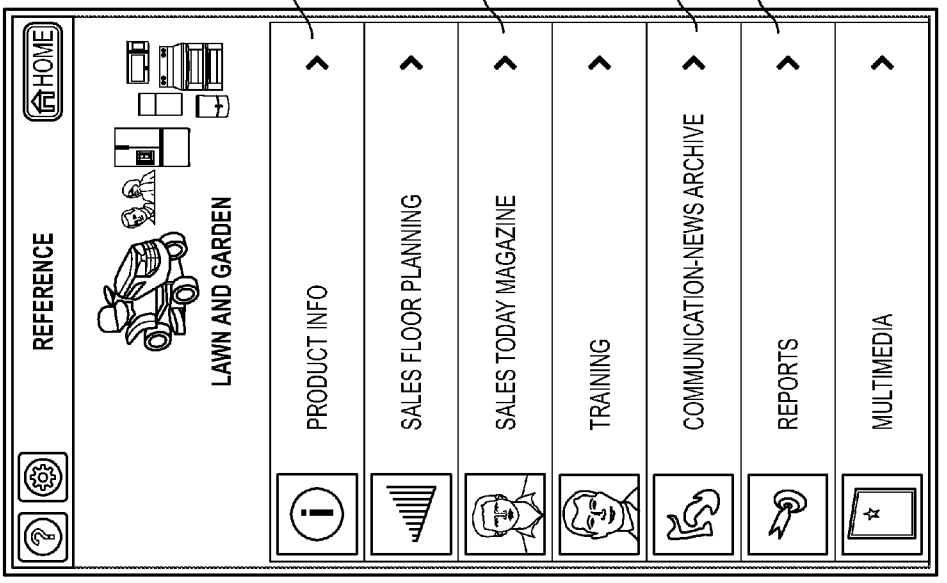

REFERENCE
HOME
LAWN AND GARDEN
PRODUCT INFO
SALES FLOOR PLANNING
SALES TODAY MAGAZINE
TRAINING
COMMUNICATION-NEWS ARCHIVE
REPORTS
MULTIMEDIA
1010
1020
1021
1023
1025
1026

FIG. 10

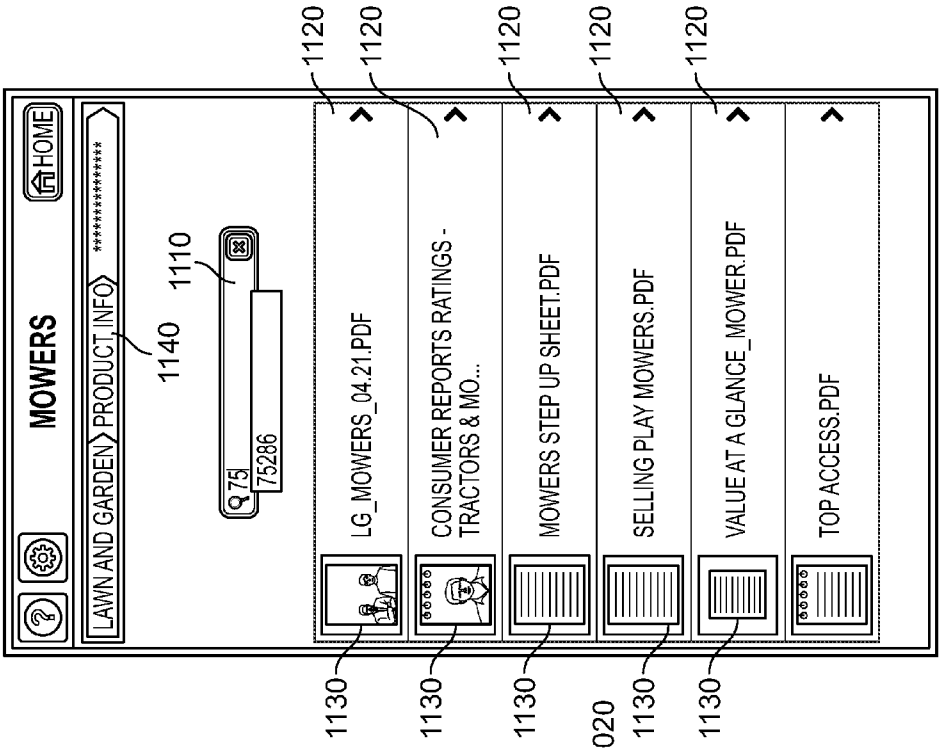

MOWERS
HOME
LAWN AND GARDEN
PRODUCT INFO
75286
1110
1120
1130
1140
LG_MOWERS_04.21.PDF
CONSUMER REPORTS RATINGS - TRACTORS & MO...
MOWERS STEP UP SHEET.PDF
SELLING PLAY MOWERS.PDF
VALUE AT A GLANCE_MOWER.PDF
TOP ACCESS.PDF

FIG. 11

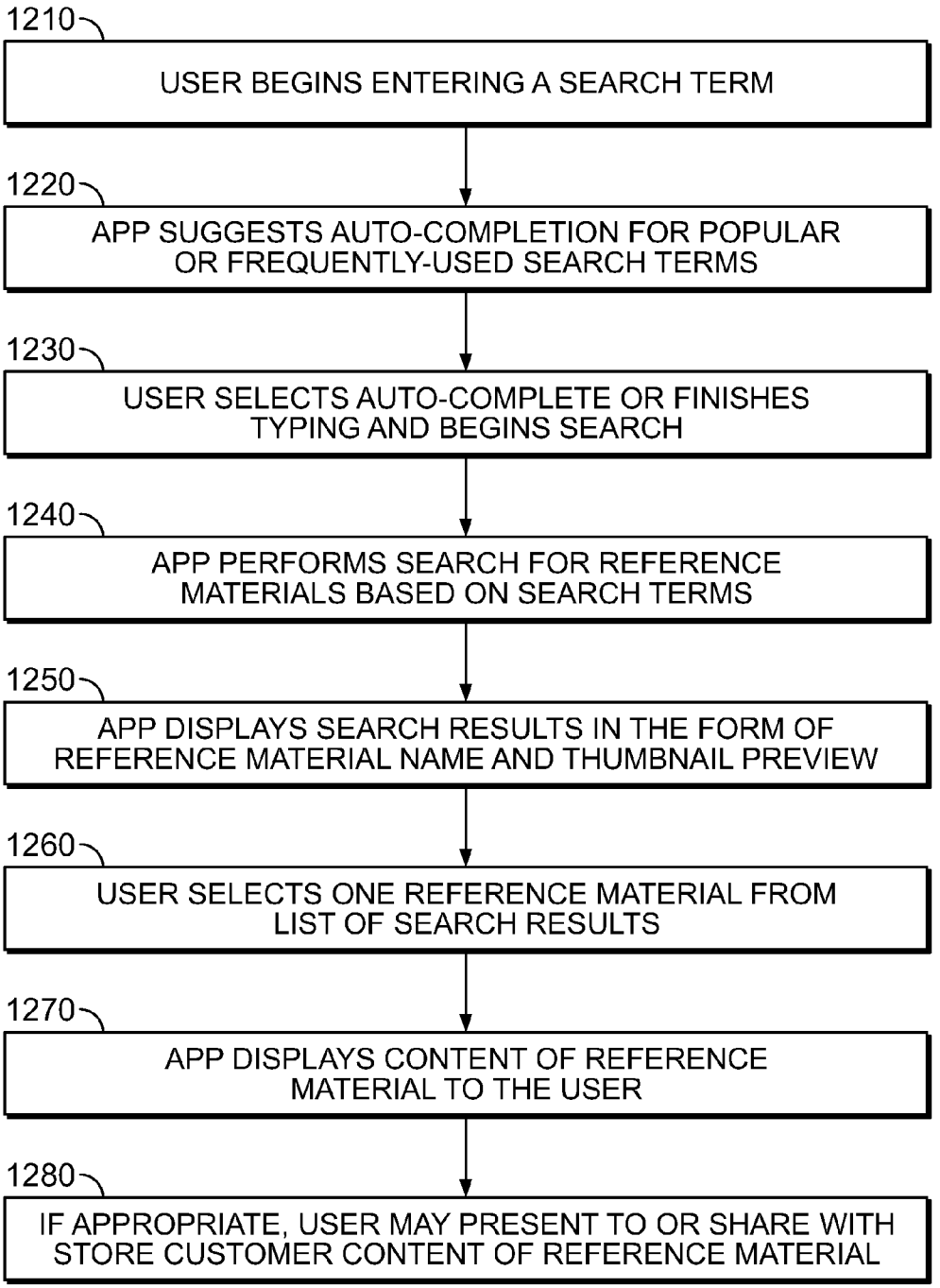

1210
USER BEGINS ENTERING A SEARCH TERM
1220
APP SUGGESTS AUTO-COMPLETION FOR POPULAR OR FREQUENTLY-USED SEARCH TERMS
1230
USER SELECTS AUTO-COMPLETE OR FINISHES TYPING AND BEGINS SEARCH
1240
APP PERFORMS SEARCH FOR REFERENCE MATERIALS BASED ON SEARCH TERMS
1250
APP DISPLAYS SEARCH RESULTS IN THE FORM OF REFERENCE MATERIAL NAME AND THUMBNAIL PREVIEW
1260
USER SELECTS ONE REFERENCE MATERIAL FROM LIST OF SEARCH RESULTS
1270
APP DISPLAYS CONTENT OF REFERENCE MATERIAL TO THE USER
1280
IF APPROPRIATE, USER MAY PRESENT TO OR SHARE WITH STORE CUSTOMER CONTENT OF REFERENCE MATERIAL

FIG. 12

METHODS AND SYSTEMS FOR CONNECTED SALES ASSOCIATE SERVICES

FIELD OF THE DISCLOSURE

[0001] The present description relates generally to Multi-channel connectivity of a sales force and more particularly to methods and systems for providing connected sales associate services.

BACKGROUND OF RELATED ART

[0002] In-store sales associates have traditionally been provided with basic in-store electronic support including, for example, point-of-sale (POS) support. Traditionally, POS support has been embodied by an in-store non-mobile cash-register that is centrally located to allow customers to pay for merchandise, and to allow sales associates to provide limited, stationary sales support, such as product lookups, sales manuals, etc.

[0003] Recent developments of robust mobile devices has lead to an implementation of a mobile platform POS support system. For example, US Patent publication No. 2011/0231272 is directed to a retail mobile POS software application that provides mobile POS support to retailers. The described system includes a scanner and iPod Touch coupled with a retail POS system, and uses a touch screen interface to POS features a salesperson would typically use to help a guest, including purchases with credit, gift and debit cards, cash, and making returns. The mobile system also combines iPod Touch features with a magnetic stripe reader, barcode scanner, and software to speed plastic and cash transactions.

[0004] For credit card and instant credit transactions, guests or purchasers, write their signature on the device using finger entry and control. Any employee who has the portable electronic device can accept cash transactions. After entering all the products and totaling the cost, the employee presses an on-screen "Cash" button to electronically open one of any number of cash drawers installed around the store. Guests (or purchasers) will continue to have the option to receive a printed or c-mailed receipt, or both.

[0005] The described mobile POS software application, however, is limited in that it is simply an extension of the traditional POS system. Today's sales associates, however, demand additional mobile access to multichannel processing and support systems to provide for enhanced sales activities. Thus, while the background systems and methods identified herein, generally work for their intended purpose, the subject disclosure provides improvements thereto, particularly by providing systems and methods for connected sales associate services by provided mobile connectivity to various sales support systems through a single integrated mobile device.

[0006] Previously, when a retail customer asked questions about specific products, sales associates would have to rely on centrally-located reference materials to determine the answer. This entailed leaving the customer to go find, for example, a user manual (usually located in the back of the store), finding the user manual among numerous similar manuals, locating the correct page with information relating to the customer's question, and returning to the customer with the answer. The present application discloses systems and methods enabling sales associates to remain with the customer at all times and answer the customer's questions by locating the user manual (and even the correct page) by searching through a database of reference materials available on the sales associates' mobile devices.

SUMMARY

[0007] In the present application, the systems and methods disclosed provide for an integrated platform upon which various tools for providing support to a sales associate are built. Specifically, the present application discloses an integrated system for electronically providing relevant sales information and:or tools to a sales associate such that the sales associates are capable of actively performing their service jobs. The system consolidates and centralizes various information and media content and places same at the fingertips of mobile device-equipped sales associates.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] For a better understanding of the present disclosure, reference may be had to various examples shown in the attached drawings.

[0009] FIG. **1** illustrates in block diagram form components of an example computer network environment suitable for implementing the example methods and systems for connected sales associate service disclosed.

[0010] FIG. **2** illustrates an example connected sales associate system in accordance with the present disclosure.

[0011] FIG. **3** illustrates an example method by which a user may be presented with a dashboard view of the connect application.

[0012] FIG. **4** illustrates an example method by which a user with different permissions may be presented with a dashboard view of the connect application.

[0013] FIG. **5** illustrates an example method by which a user may view various applications associated with the user.

[0014] FIG. **6** illustrates an example method by which a user may customize the application layout of the example connect system disclosed herein.

[0015] FIG. **7** illustrates an example method by which a user may be presented with a dashboard view of the reference application.

[0016] FIG. **8** illustrates an example method by which a user may control the dashboard view of the reference application.

[0017] FIG. **9** illustrates an example method by which a user may search the reference application through the connect application

[0018] FIGS. **10-12** each illustrate an example method by which a user may search the reference application for reference materials and information concerning products.

DETAILED DESCRIPTION

[0019] The following description of example methods and systems is not intended to limit the scope of the description to the precise form or forms detailed herein. Instead the following description is intended to be illustrative so that others may follow its teachings.

[0020] A mobile application for connecting sales associates to various service systems is disclosed hereinbelow. In general, the system provides for mobile device connectivity for a sales associate to access various retail systems. In at least one example, the disclosed invention leverages mobile technology, chat functionality, social networking, rewards, electronic catalogs, marketing and/or sales data, retail online shopping technology and/or a consumers' social connections, such as

through a social media website, to enable each sales associate to provide a customize and personal shopping experience for multiple customers while maintaining their retail location mobility.

[0021] In one example, the mobile application is a hybrid application delivered on mobile devices such as an iPod and/or an iPad. This example application may service multiple store associates in multiple locations across different and/or similar retail umbrellas. Still further the example application may serve as a single point of entry for tasks, applications, information, reports, and/or other suitable programs. Still further, users of the example applications may be provided with immediate access to their daily task lists, lead management, time-clock management, social media, store statistics, store performance, etc.

[0022] In another example, the afore-mentioned hybrid application is designed to simplify users' searches for information and media content by consolidating and centralizing same within a single reference application. Such information and media content is typically categorized by business area, with common departments grouped adjacently. For example, apparel, beauty, jewelry and cosmetics products are grouped adjacently, and consumer appliances, lawn and garden products and hand tools are grouped adjacently. The reference applications enables sales associates to find relevant reference materials for such products quickly via a search bar.

[0023] With reference to the figures, the following discloses various example systems and methods for providing a system for connectivity of a sales associate to a retail support network. To this end, a processing device **20"**, illustrated in the exemplary form of a mobile communication device, a processing device **20'**, illustrated in the exemplary form of a computer system, and a processing device **20** illustrated in schematic form, are provided with executable instructions to, for example, provide a means for a retail organization to provide standard connectivity to a sales associate for accessing a host system server **68** and, among other things, for connecting to a hosted online retail environment (e.g. a retail store), a social networking site, a user profile, customer and/or sales support, other sales associates, personal shoppers, etc. Generally, the computer executable instructions reside in program modules which may include routines, programs, objects, components, data structures, etc. that perform particular tasks or implement particular abstract data types. Accordingly, those of ordinary skill in the art will appreciate that the processing devices **20**, **20'**, **20"** illustrated in FIG. **1** may be embodied in any device having the ability to execute instructions such as, by way of example, a personal computer, a mainframe computer, a personal-digital assistant ("FDA"), a cellular telephone, a mobile device, a tablet, an creader, or the like. Furthermore, while described and illustrated in the context of a single processing device **20**, **20'**, **20"** those of ordinary skill in the art will also appreciate that the various tasks described hereinafter may be practiced in a distributed environment having multiple processing devices linked via a local or wide-area network whereby the executable instructions may be associated with and/or executed by one or more of multiple processing devices.

[0024] For performing the various tasks in accordance with the executable instructions, the example processing device **20** includes a processing unit **22** and a system memory **24** which may be linked via a bus **26**. Without limitation, the bus **26** may be a memory bus, a peripheral bus, and/or a local bus using any of a variety of bus architectures. As needed for any particular purpose, the system memory **24** may include read only memory (ROM) **28** and/or random access memory (RAM) **30**. Additional memory devices may also be made accessible to the processing device **20** by means of, for example, a hard disk drive interface **32**, a magnetic disk drive interface **34**, and/or an optical disk drive interface **36**. As will he understood, these devices, which would be linked to the system bus **26**, respectively allow for reading from and writing to a hard disk **38**, reading from or writing to a removable magnetic disk **40**, and for reading from or writing to a removable optical disk **42**, such as a CD/DVD ROM or other optical media. The drive interfaces and their associated computer-readable media allow for the nonvolatile storage of computer-readable instructions, data structures, program modules, and other data for the processing device **20**. Those of ordinary skill in the art will further appreciate that other types of non-transitory computer-readable media that can store data and/or instructions may be used for this same purpose. Examples of such media devices include, but are not limited to, magnetic cassettes, flash memory cards, digital videodisks, Bernoulli cartridges, random access memories, nano-drives, memory sticks, and other read/write and/or read-only memories.

[0025] A number of program modules may be stored in one or more of the memory/media devices. For example, a basic input/output system (BIOS) **44**, containing the basic routines that help to transfer information between elements within the processing device **20**, such as during start-up, may be stored in ROM **28**. Similarly, the RAM **30**, hard drive **38**, and/or peripheral memory devices may be used to store computer executable instructions comprising an operating system **46**, one or more applications programs **48** (such as a Web browser), other program modules **50**, and/or program data **52**. Still further, computer-executable instructions may be downloaded to one or more of the computing devices as needed, for example via a network connection.

[0026] To allow a user to enter commands and information into the processing device **20**, input devices such as a keyboard **54** and/or a pointing device **56** are provided. While not illustrated, other input devices may include a microphone, a joystick, a game pad, a scanner, a camera, touchpad, touch screen, virtual keyboard, etc. These and other input devices would typically be connected to the processing unit **22** by means of an interface **58** which, in turn, would be coupled to the bus **26**. Input devices may be connected to the processor **22** using interfaces such as, for example, a parallel port, game port, firewire, or a universal serial bus (USB). To view information from the processing device **20**, a monitor **60** or other type of display device may also be connected to the bus **26** via an interface, such as a video adapter **62**. In addition to the monitor **60**:the processing device **20** may also include other peripheral output devices, not shown, such as, for example, speakers, cameras, printers, or other suitable device.

[0027] As noted, the processing device **20** may also utilize logical connections to one or more remote processing devices, such as the host system server **68** having associated data repository **68**A. In this regard, while the host system server **68** has been illustrated in the exemplary form of a computer, it will be appreciated that the host system server **68** may, like processing device **20**, be any type of device having processing capabilities. Again, it will be appreciated that the host system server **68** need not be implemented as a single device but may be implemented in a manner such that the tasks performed by the host system server **68** are distributed amongst a plurality of processing devices/databases located

at different geographical locations and linked through a communication network. Additionally, the host system server **68** may have logical connections to other third party systems via a network **12**, such as, for example, the Internet, LAN, MAN, WAN, cellular network, cloud network, enterprise network, virtual private network, wired and/or wireless network, or other suitable network, and via such connections, will be associated with data repositories that are associated with such other third party systems. Such third party systems may include, without limitation, systems of banking, credit, or other financial institutions, systems of third party providers of goods and/or services, systems of shipping/delivery companies, etc.

[0028] For performing tasks as needed, the host system server **68** may include many or all of the elements described above relative to the processing device **20**. In addition, the host system server **68** would generally include executable instructions for, among other things, coordinating a personal shopper relationship, providing a social network, storing a user's personal information, facilitating recommendations, providing access to merchandise, searching and identifying reference materials, etc.

[0029] Communications between the processing device **20** and the host system server **68** may be exchanged via a further processing device, such as a network router (not shown), that is responsible for network routing. Communications with the network router may be performed via a network interface component **73**. Thus, within such a networked environment, e.g., the Internet, World Wide Web, LAN, cloud, or other like type of wired or wireless network, it will be appreciated that program modules depicted relative to the processing device **20**, or portions thereof, may be stored in the non-transitory memory storage device(s) of the host system server **68**.

[0030] Referring to FIG. **2**, there is illustrated an overview of an example system **200** for providing multiple sales associates with access to multiple application providing connectivity to a retail environment's network in accordance with an example of the present disclosure. The system **200** is well-suited for operation on a distributed network system, such as, for example, a client-server architecture utilizing the Internet, cloud, mobile network, cellular network, or other suitable wired and/or wireless network. The system **200** may be implemented in various other communication networks and/or mediums as desired including, for example, a localized, non-distributed network.

[0031] Generally speaking, the system **200** is operable to facilitate online connectivity of multiple sale associates to various in-store applications as well as networked and/or non-networked data repositories. It will be appreciated by one of ordinary skill in the art that the number of sales associates concurrently using the system **200** may vary as desired. In the illustrated example, a first associate **210** may access the system **200** through any suitable device **20**, such as a computer system **212**, a smart phone **214**, a tablet computer **216**, or any other suitable known or yet to be developed communication device. In the disclosed example, the communication device **20** is capable of Internet browsing, textual transmission, and/or video transmission (e.g., video chat, video phone, etc), but it will be appreciated by one of ordinary skill in the art that the communication device may be any suitable communication device including any voice, email, and/or text communication with or without use of other transmission types.

[0032] Concurrently, in the illustrated example, a second sales associate **220** may also access the system **200** through any suitable device, such as a computer system **222**, a smart phone **224**, a tablet computer **226**, or any other suitable known or yet to be developed communication device. Similar to the first user's devices, the communication devices **222**, **224**, **226** are each capable of Internet browsing, textual transmission, and/or video transmission (e.g., video chat, video phone, etc) as desired.

[0033] Each sales associate **210**, **220** accesses the host server **68** through the network(s) **12**. In this example, each associate **210**, **220** accesses the system **68** through a separate network **12**, but it will be appreciated that the network access may be architected in any suitable manner. Each of the network(s) **12** provides network routing utilizing a cloud based network, although any appropriate routing device (software, firmware, hardware, and/or the like) may he utilized. The connection between the user **210** and the user **220** may be through the network **12**, through a social network **68'**, and/or through the host system **68**.

[0034] The illustrated approach may take advantage of the convergence of mobile devices, IP telephony (e.g., VoIP, SIP, etc) and Internet application such as, for example, Facetime, Skype, etc. The example system **200** may also enable interactive communications amongst user across varied platforms, (e.g., iOS, Android, Windows, etc.), devices (e.g., Mobile phones, PCs, Macs, Tablets, etc), networks (e.g., Wi-Fi, 3G, 4G, etc.), and media (e.g., voice, text, video, etc).

[0035] For allowing a user to setup and/or manage all of their sales associate tasks, messages, research information, etc. the host server system **68** may make available to the sales associate one or more tools by which a sales associate can, for example, interact with graphical user interface elements to create, perform, manage and/or receive information such as sales data, point-of-sale interactivity, sales and/or marketing information, rewards information, credit information, manuals, retail store information, employment data and/or records, and/or any other suitable information.

[0036] By way of example only, FIG. **3** illustrates a screen shot of various management tools that may be provided to a sales associate at the user computer device **20** via the host system server **68**. As illustrated, a sales associate management application **300** may include a sales associate area **302**, by which a use can see information regarding the currently logged in sales associate, a logout selectable interface **304**, which can be utilized to disconnect and/or deauthorize the device **20** from the server **68**, a sales data area **306** to provide the sales associate with links to authorized sales data trends provided by the server **68**, a listing area **308** providing a listing of sales associates logged into the system, an application area **310** proving a selectable listing and/or iconic view of available applications, and a navigation area **312** allowing quick navigation of various user interfaces as will be described herein. Additionally, any alerts, such as, for example any news alerts, may be displayed to the sales associate at an area **320** as illustrated in FIG. **4**. It will be appreciated by one of ordinary skill in the art that these areas need not be displayed concurrently and/or in the exact manner as shown in FIG. **2** and that variations may be made as desired.

[0037] More particularly, once the user navigates to the sales associate management application **300** that is hosted in the host server system **68**, a determination may be made as to whether or not the user is currently logged into the system as illustrated in FIG. **3**. If the sales associate is not logged into the system and it is not indicated to the system that the user has otherwise previously used the sales associate manage-

ment application **300**, which indication may be stored in a cookie stored on the device **20**, or may be provided as a dedicated device (e.g., permanently logged in as a specific user), the sales associate may be provided with a welcoming message and directed to the area **304** where the user may access a log-in procedure.

[0038] When the user is logged into the sales associate management application **300**, the system may next determine the authorization level of the user by querying the server **68**. Upon determination of the authorization level, the system may display different information to the sales associate. For example, as illustrated in FIG. **3**, the sales associate is determined to be a manager at area **302**. Accordingly, in this example, the area **308** may provide a listing of the associates reporting to the manager that are currently logged into the system. For example, login in as a manger may cause the server **68** to query the data repository **68**A and/or any other suitable system component to determine the available sales associates currently logged into the system. It will be appreciated, however, that information provided to the user at the area **308** and/or any other area of the application **300** may be predetermined and/or otherwise defaulted based upon the authorization level of the user, and/or may be overwritten and/or other determined through user preferences set by the user and associated with the user log-in. In some example, the listing of sales associates may include a listing of all associated sales associates, with a visual indication on some and/or all users who are not currently logged into the system, such as graying-out, etc. As illustrated in FIG. **4**, if the server **68** returns that the user of the application **300** is a sales associate reporting to a manager, the application **300** may display at the area **308** a listing of tasks assigned and/or other relevant information to the associate by a user of authority, such as for example the manager.

[0039] Referring now to FIG. **5**, in order to provide various applications to the user, the system provides a menu of applications by selecting the area **502** in the navigation bar **312**. By selecting the area **502**, the server **68** queries the data repository **68**A to determine the pre-set and/or customized applications available to the user. Alternatively, the applications may be stored on the device **20** itself, and the user may have global access and/or restricted access to the applications based upon their login credentials. In the example of FIG. **5**, the applications are listed in the area **504** as thumbnail icons. It will be appreciated, however, by one of ordinary skill in the art that the method of displaying the applications may vary as desired including listing, etc. Additionally, the example area **504** includes a page indicator **506** to visually describe to the user what page the device is displaying in regard to the available applications. As can be appreciated, the applications displayed in the area **504** may be a inclusive and/or exclusive set of the applications provided for in the application area **310** shown in FIG. **3**. While not shown in FIG. **5**, the subject reference application is among the several "apps" to be displayed in the area **504**.

[0040] Referring now to FIG. **6**, there is illustrated an example interface **600** that may be used by the device **20** to cause the server **68** to modify the application and/or number of applications displayed to the user in the area **310** as illustrated in FIG. **3**. In this way, the application may be truly customized to meet each of the sales associate's individual needs. Sales associates who use the reference application regularly would benefit from designating the reference application as a "common app" for ease of to be displayed in the area **310** as illustrated in FIG. **3**.

[0041] Turning now to FIGS. **7-8**, a dashboard view of the reference application is illustrated. From the dashboard, the user can select one of several menu options **710** in lower pane **720** by tapping one such option. As shown in FIG. **8**, the user can also swipe upwards or downwards within the lower pane **720** to view additional menu options **710**, or swipe leftwards or rightwards in the upper pane **730** to view additional options. Swiping up and down within the lower pane enables users to scroll through various departments, such as training, floor planning or news archives. "News" articles within the application may comprise updates to specific store departments or notices of current or upcoming sales, among other relevant information.

[0042] FIG. **9** demonstrates how a user can activate the reference application **910** from within the connect application. Once the user selects the reference application **910**, the user can tap search bar **920**, and a native keyboard **930** will appear. As the user begins entering text into search bar **920**, frequently searched terms may appear to prompt the user to select recently or frequently searched reference materials. Search terms can vary broadly to widely access both general reference materials for given products (such as, for example, owner's manuals) as well as specific information about store inventories, sales, etc. Thus, potential search terms can include "footwear," "cosmetics," jewelry catalog," "sales today," and "stockroom," among others.

[0043] Once the user has entered text into search box **920**, the host system server **68** can transmit such data **68**A through the network **12** to the network interface **73**, thereby enabling the application to search through reference materials which are stored in the system memory **24**. The reference application returns several search results in the form of reference materials **940** which match the searched term, and also displays thumbnail previews **950** of such search results **940**. Reference materials **940** may take the form of HTML or PDF documents, documents in other formats which may be dynamically converted to PDF format, or links to online videos. Once a user selects a specific reference material **945**, the application opens and displays that reference material at step **960**. In the case in which the reference material **945** is an online video, the application would open and play such online video at step **960**, using any auxiliary application necessary for playing such online video.

[0044] Notably, a user can search for reference materials **940** using the document's title, text within the document, or through tags or metatags. Document titles are provided according to naming conventions which includes information on the relevant store department, product, and date of posting. By way of example, the file naming convention may take the form of DEPT_DESCRIPTOR_DATE.EXT, where "DEPT" refers to the store department, "DESCRIPTOR" relays descriptive information about the product and/or model number thereof, "DATE" refers to the date the document was uploaded, and "EXT" refers to the file extension. Thus, an example file name for the owner's manual for a riding lawn mower may be entitled LawnGarden_JohnDeere1600__05272012.pdf, where "LawnGarden" refers to the store department, "JohnDeere1600" refers to a make and model of a specific riding lawn mower, and "05272012" corresponds to the date on which the manual was uploaded, in this case, May 27, 2012. Such dates are important because the reference application contains notification processes to ensure that the

reference materials and related content are current and relevant. Indeed, the reference materials **940** may incorporate additional date information within tags or metatags, such as expiration dates, to notify the user when a given reference material may no longer reflect the make or model currently sold in stores.

[0045] Turning now to FIGS. **10-11**, there is illustrated a dashboard within the "Lawn and Garden" department of the reference application. Specifically, upper pane **1010** shows the "Lawn and Garden" department, though the user can swipe upper pane **1010** rightward for other departments, such as tools, tool storage, or consumer appliances. In lower pane **1020**, the user can choose to search for product info, at button **1021**, can view ongoing sales at button **1023** or can search for news or reports at buttons **1025** or **1026**, respectively. Once the user selects button **1021** for product info, the user is taken to a Product Info page (not shown), where the user can choose from one of several products within the department listed. Once the user has selected from a list of products, that Product page is shown in FIG. **11** (in this case, the product is "Mowers"). From the Product page, a search box **1110** will appear, and the user can search for reference materials **1120**, which will populate as the user enters text. As shown in FIG. **11**, the application displays the title of reference materials **1120** alongside thumbnail previews **1130** for each such material. The application also contains a path hierarchy **1140**, which incorporates "breadcrumb" functionality to enable users to return to any of the menus previously viewed within the current search.

[0046] FIG. **12** reflects a flowchart illustrating how a user can identify reference materials to answer questions posted by customers and potentially share such reference materials with the store customer. At step **1210**, a user has already opened the reference application and can begin by entering a search term into the search box as shown in FIGS. **9** and **11**. As the user enters text, at step **1220**, the application automatically suggests frequently-used search terms, which the user can either select or ignore at step **1230**. At step **1240**, the application performs the search, and displays the results of that search at step **1250**, including the title of each reference material and a thumbnail preview thereof. The user can then select one of the reference materials at step **1260**, and the application will retrieve and display the content of that reference material at step **1270**, whether that reference material is a PDF document or an online video, in which case the application will pull up any auxiliary application necessary for displaying online videos. Finally, at step **1280** and only where appropriate, the user can show the reference material to the store customer, or the user may have the option of sharing such reference material with the store customer via email, Facebook, or other social media.

[0047] Although certain example methods and apparatus have been described herein, the scope of coverage of this patent is not limited thereto. On the contrary, this patent covers all methods, apparatus, and articles of manufacture fairly falling within the scope of the appended claims either literally or under the doctrine of equivalents.

1. A non-transitory computer-readable media having stored thereon computer executable instructions, wherein the instructions perform steps for enabling a sales associate at a retail location to procure a variety of reference materials from a central server via a mobile computing device, comprising:

hosting a database of reference materials and operational information regarding a retail establishment; and

providing a first user interface comprising user interface elements for allowing the sales associate at the retail location to access, using a communication network, a central server for the retail establishment, the central server allowing a plurality of additional sales associates at the retail location on a corresponding plurality of additional mobile devices to access the central server using a corresponding plurality of additional user interfaces and a corresponding plurality of additional communication networks,

wherein the first user interface and the plurality of additional user interfaces cause the central server to query the database to return and display reference materials at one or more of the first user interface and the plurality of additional user interfaces at the retail location.

2. The non-transitory computer-readable media as defined in claim **1**, wherein the user interface and the plurality of additional user interfaces further cause the central server to query the database to return and display sales or inventory information for the retail establishment.

3. The non-transitory computer-readable media as defined in claim **1**, wherein the reference materials comprise documents which are formatted in HyperText Markup Language ("HTML") or Portable Document Format ("PDF").

4. The non-transitory computer-readable media as defined in claim **1**, wherein the reference materials comprise links to online videos, and wherein displaying the reference materials comprises running an auxiliary application capable of displaying online videos.

5. The non-transitory computer-readable media as defined in claim **1**, wherein the first user interface and the plurality of additional user interfaces are provided on at least one of a mobile personal computer, a personal-digital assistant ("PDA"), a cellular telephone, a mobile device, a tablet, or an ereader.

6. The non-transitory computer-readable media as defined in claim **1**, wherein the first user interface and the plurality of additional user interfaces cause the central server to query the database in response to an input received from the sales associate and/or the plurality of additional sales associates.

7. The non-transitory computer-readable media as defined in claim **6**, wherein the input comprises at least one search term.

8. The non-transitory computer-readable media as defined in claim **7**, wherein the at least one search term corresponds to a title of a reference material.

9. The non-transitory computer-readable media as defined in claim **7**, wherein the at least one search term corresponds to a metatag assigned to a reference material.

10. The non-transitory computer-readable media as defined in claim **7**, wherein the at least one search term corresponds to text found within a reference material.

11. The non-transitory computer-readable media as defined in claim **1**, wherein displaying the reference materials further includes displaying a thumbnail preview of said reference materials.

12. The non-transitory computer-readable media as defined in claim **1**, wherein at least one of the plurality of additional user interfaces is of a type different from a type of the first user interface.

13. The non-transitory computer-readable media as defined in claim **1**, wherein the computer executable instruc-

tions comprise code for communicating at least a portion of the reference materials from the first user interface to at least another user interface using a social network.

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